

Re. : Amendment and Response to Office Action mailed March 3, 2008
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Filed : July 10, 2003

II. REMARKS

Claims 21-47 were previously pending in the application and the Office Action rejected Claims 21-47. In particular, the Office Action objected to the drawings in connection with Claim 27; rejected Claims 21-25, 27, 43-45 and 47 under Section 112, second paragraph; rejected Claims 21-47 on the grounds of nonstatutory obviousness-type double patenting; and rejected Claims 26-30, 32-36 and 46 under Section 102(b). Therefore, if the Section 112 and double patenting rejections are overcome, then Claims 21-25, 31, 37-45 and 47 should be allowable.

By the foregoing amendments, Applicant amended Claims 21, 26-31, 43, 46 and 47 to further clarify, more clearly define and/or broaden the claimed invention, and expedite receiving a notice of allowance. Pursuant to 37 C.F.R. § 1.121(f), no new matter is introduced by these amendments. After these amendments, Applicant believes that Claims 21-47 are allowable over the cited references.

Please note that Applicant's remarks are presented in the order in which the issues were raised in the Office Action for the convenience and reference of the Examiner. In addition, Applicant requests that the Examiner carefully review any references discussed below to ensure that Applicant's understanding and discussion of the references, if any, is consistent with the Examiner. Further, the following remarks are not intended to be an exhaustive enumeration of the distinctions between any particular reference and the claimed invention. Rather, the distinctions identified and discussed below are presented solely by way of example to illustrate some of the differences between the claimed invention and that reference.

A. Response to the Objection to the Drawings

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The Office Action objected to the drawings under 37 C.F.R. § 1.83(a). The Office Action stated the drawings must show every feature of the invention specified in the claims. The Office Action stated therefore the outwardly extending flange (Claim 27) must be shown or the feature(s) cancelled from the claim(s). The Office Action further stated that no new matter should be entered.

Applicant respectfully traverses this objection to the drawings because the outwardly extending flange is shown in the figures. For example, as shown in Figures 8 and 9, the first hinge connector 202 may include a body 207 and a connector portion 208. The connector portion 208 may include an aperture 216 and a flange, such as the hook or cam portion 212. Because the drawings show the outwardly extending flange, Applicant requests that this objection to the drawings.

B. Response to the Objection to the Specification

The Office Action objected to the specification as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). The Office Action stated that correction of the following is required: The expression “outwardly extending flange” has no definite antecedent basis in the specification.

Applicant respectfully traverses this objection to the specification because the specification provides proper antecedent basis for the claimed subject matter. For example, the specification states: “Locking pin 230 and locking slots 228 cooperate with cam portion 212 of first hinge connector 202 to form the locking mechanism which will now be described.” Paragraph [0083]. In addition, the specification states the following:

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With the locking pin 230 in the 'locked' position, the cam portion 212 of first hinge connector 202 abuts against locking pin 230. Thus, first hinge connector 202 is unable to rotate in the counter clockwise position (using FIG. 10 as a reference point), which prevents table top 102 from folding together. That is, with cam portion 212 abutting against locking pin 230, side rails 140 A, 140 B are unable to undergo relative rotary motion. Thus, when hinge assembly 200 is in the 'locked' position, table top 102 is level and stable. Hinge assembly 200 can be locked before or after legs 144 A, 144 B are fully unfolded.

With reference to FIG. 11, in the unlocked position, locking pin 230 is placed in locking slot 228 in the position farthest away from hinge axis 203. In the unlocked position, cam portion 212 of first hinge connector 202 is not impeded by locking pin 230 such that first hinge connector 202 can freely rotate about hinge axis 203 in both the clockwise and counterclockwise directions. First hinge connector 202 is only impeded by the limit created when the interior edges 118 A, 118 B of first and second planar portions 106, 108 meet.

Paragraphs [0083] and [0084].

Thus, the specification describes the cam portion 212 in detail and all or a portion of the cam portion may form the outwardly extending flange. In addition, the original Claim 19 provided, *inter alia*, "locking mechanism comprising: a cam portion formed on the second end of the first hinge connector; a locking slot formed on the second hinge connector; and a locking pin adapted to be disposed in the locking slot and selectively moveable between a locked position wherein the locking pin is positioned so that the cam portion abuts the locking pin so as to substantially prevent at least one of the first hinge connector from rotatable movement about the hinge axis, and an unlocked position wherein the first hinge connector is able to freely rotate about the hinge axis."

Therefore, Applicant requests that this objection to the specification be withdrawn because the specification proper antecedent basis for the expression "outwardly extending flange."

C. Response to the Section 112 Rejection

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The Office Action rejected Claims 21-25, 27, 43-45, 47 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Office Action stated that Claim(s) 21, 43 and 47 fail(s) to recite sufficient structural elements and interconnection of the elements to positively position and define how: (1) the cam portion is “sized and configured” to contact the locking member (Claim 21); and (2) the outwardly extending flange and how such structure is sized and configured to engage the locking member (Claim 27) how the lever and apertures guide the locking pin (Claims 43, 47) so that an integral structure able to function as claimed is recited.

Applicant respectfully traverses this rejection because the claims particularly point out and distinctly claim the subject matter which applicant regards as the invention. However, to further clarify, more clearly define and/or broaden the claimed invention, and expedite receiving a notice of allowance, Applicants amended Claims 21, 27, 43 and 47.

For example, Applicant amended Claim 21 to recite “a cam portion of the first hinge connector that abuts against the locking member when the locking member is in the locked position to maintain the table top in the working position, the cam portion extending outwardly from the connector portion of the first hinge connector.” Thus, Claim 21 positively recites the cam portion of the first hinge connector abuts against the locking member when the locking member is in the locked position to maintain the table top in the working position and the cam portion extending outwardly from the connector portion of the first hinge connector.

In addition, Applicant amended Claim 27 to recite “the engaging portion engaging the locking

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member when the locking member is in the locked position.” Therefore, Claim 27 positively recites the engaging portion engaging the locking member when the locking member is in the locked position.

Applicant also amended Claim 43 to recite “a lever including an aperture, the locking pin being disposed within the aperture; wherein movement of the lever results in movement of the locking pin relative to the aperture; and wherein an inner surface of the aperture engages the locking pin and moves the locking pin among the plurality of positions when the lever is being moved.” Thus, Claim 43 positively recites the lever includes an aperture, the locking pin is disposed within the aperture, movement of the lever results in movement of the locking pin relative to the aperture; and an inner surface of the aperture engages the locking pin and moves the locking pin among the plurality of positions when the lever is being moved.

Finally, Applicant amended Claim 47 to recite “further comprising an aperture in the lever, the engaging surface forming at least a portion of an inner surface of the aperture.” Therefore, Claim 47 positively recites the lever includes an aperture and the engaging surface forms at least a portion of an inner surface of the aperture.

Accordingly, Applicants request that this Section 112 rejection of Claims 21, 27, 43 and 47 be withdrawn. Applicants also request that this Section 112 rejection of Claims 22-25, 44 and 45 be withdrawn because these claims are dependent upon amended Claims 21 and 43 respectively.

D. Response to the Double Patenting Rejection

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The Office Action rejected Claims 21-47 on the ground of non-statutory obviousness-type double patenting as being unpatentable over the claims of United States Patent No. 6,905,166. The Office Action stated that although the conflicting claims are not identical, they are not patentably distinct from each other because both sets of claims call for a folding table structure with the differences being obvious and well within the level of ordinary skill in the art.

The Office Action provisionally rejected Claims 21-47 on the ground of non-statutory obviousness-type double patenting as being unpatentable over the claims of co-pending United States patent application serial no. 11/134,816. The Office Action stated that although the conflicting claims are not identical, they are not patentably distinct from each other because both sets of claims call for a folding table structure with the differences being obvious and well within the level of ordinary skill in the art. The Office Action stated this is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

As stated in the Office Action, a timely filed terminal disclaimer in compliance with 37 C.F.R. § 1.321(c) or § 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application.

Applicant submits herewith a terminal disclaimer in compliance with 37 C.F.R. § 1.321 to overcome the nonstatutory double patenting rejection in view of United States Patent No. 6,905,166 and United States patent application serial no. 11/134,816. Applicant also submits herewith a Certificate under 37 C.F.R. § 3.73(b) establishing ownership of United States Patent No. 6,905,166

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and United States patent application serial no. 11/134,816 by the Assignee. Applicant further submits a Certificate under 37 C.F.R. § 3.73(b) establishing ownership of this application by the Assignee. Accordingly, Applicant requests that this double patenting rejection in view of United States Patent No. 6,905,166 and United States patent application serial no. 11/134,816 be withdrawn.

B. Response to the Section 102(b) Rejection

The Office Action rejected Claims 27, so far as definite, 26, 28-30, 32, 33, 34, 35, 36, 46, are rejected under 35 U.S.C. 102(b) as being anticipated by Carlson. The Office Action stated the patent to Carlson (Figs. 4-6) teaches structure as claimed including top, frame, hinge assembly, first and second bracket with first through fourth flanges, pivot member (Fig. 4), locking member (85A), lever (84A), and brace.

Applicants respectfully traverse this rejection because the Carlson patent does not disclose each and element of Claims 26-30, 32-36 and 46. The Carlson patent discloses a folding table with locking hinge. For example, the Carlson patent, in the summary of the invention section, states:

The hinge means comprises at least a pair of hinge plates attached perpendicularly to the table surface members beneath their adjacent edges with a pivot pin or bolt therethrough to define the pivot axis. A locking bar is pivotally suspended generally beneath the edge of one of the table surface members for permitting movement of the bar toward and away from the hinge plate on the same table surface member, which has a recess formed in its edge for receiving the locking bar. The hinge plate attached to the other table surface member has a tab formed on its edge at a position so that a first edge of the tab contacts the locking bar in its recess when the table reaches its intermediate position just short of the horizontal position. A handle attached to the bar beneath the side edge of the table and projecting perpendicularly of the bar away from the adjacent edges and the hinge assembly is used to pivot the locking bar from the recess to allow the table to move to its usable position. Release of the handle

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allows the locking bar to return to the recess, and the recess and the second edge of the tab serve as a lock to prevent the table from being opened without reactivation of the handle.

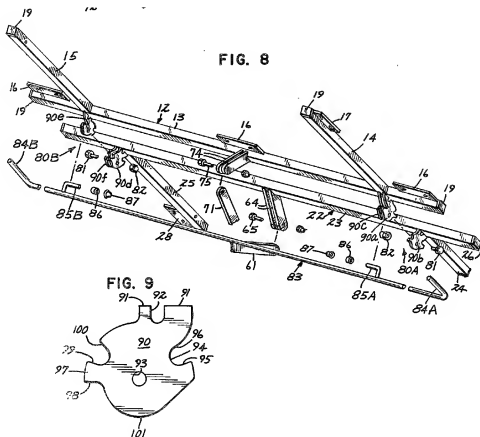
Col. 2, lines 45-66 (emphasis added).

In greater detail, the Carlson patent states:

The construction of the lockable hinge is best seen in FIG. 8, in which the table surface members and legs have been deleted, so as to better show the main frame members 13 and 23 and the hinge means which interconnects them. In the preferred embodiment as shown in the drawings, the hinge assembly includes a pair of hinge assemblies 80A and 80B, which comprise a plurality of hinge plates attached to the frame members and pivotally connected by pivot bolts. Hinge assembly 80A includes hinge plates 90a and 90c which are welded to the underside of main frame member 13 where it is intersected by frame arm member 14. Hinge plates 90a and 90c are spaced apart a distance to receive hinge plate 90b which is attached to the underside of main frame member 23 at its connection to frame arm member 24. FIG. 8 is an exploded view, and it will be appreciated that when fully assembled, hinge plate 90b fits between hinge plates 90a and 90c, and a pivot bolt 81 passes through apertures provided in all three hinge plates and is secured by a cap nut 82.

Col. 4, line 51 to col. 5, line 2 (emphasis added). For the convenient of the Examiner, Figures 8 and 9 of the Carlson patent are shown below.

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The Carlson patent explains the hinge assemblies 80A and in greater detail. For example, the Carlson patent states:

Lock bar 83 is an elongate steel rod or bar extending substantially the width of the table. Bar 83 has handle portions 84A and 84B formed at its ends, and these handles extend perpendicularly to the axis of lock bar 83. A pair of L-shaped pivot pins 85A and 85B are welded to lock bar 83 at either end, spaced inwardly from the handles. These pins have pivot portions parallel to lock bar 83 and offset or foot portions which serve to space the pivot portions a predetermined distance from the lock bar.

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As seen in FIG. 9, hinge plate 90 includes the aperture 93 which receives pivot

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bolt 81, by means of which the hinge plates are pivotally connected. Hinge plate 90 has a base edge 91 which is generally flat and which is intended for abutment with the underside of the table main frame members. The hinge plates may be secured in place by welding them to the frames along edge 91.

A pivot recess 92 is provided in base edge 91 for receiving the pivot pin of the locking bar. When base edge 91 of the hinge plate is welded to the base frame, pivot recess 92 and the adjoining portion of the frame member define an aperture for receiving pivot pins of the lock bar. Specifically, recesses 92 of hinge plates 90a and 90c receive pivot pin 85A and recess 92 of hinge plate 90e receives pivot pin 85B. Recesses 92 of hinge plates 90b, 90d and 90f are not used.

Referring again to FIG. 9, a bar recess 94 is provided along one edge, and is sized to receive the thickness of lock bar 83. Recess 94 extends generally radially inwardly towards aperture 93, and has a first edge 95 and a second edge 96.

On generally the other side of hinge plate 90 there is provided a tab 97, which projects generally radially outwardly from aperture 93. Tab 97 has a first edge 98 and a second edge 99.

Col. 5, lines 17-22, 32-56 (emphasis added). Thus, the Carlson patent discloses a complicated structure with multiple parts and components.

In order to further clarify, more clearly define and/or broaden the claimed invention, and expedite receiving a notice of allowance, Applicants amended Claims 26, 28 and 46.

For example, Applicants amended Claim 26 to provide, *inter alia*, “a locking slot in the second portion of the hinge assembly, the locking slot including a first end disposed towards the hinge pin and a second end disposed away from the hinge pin; and a locking member disposed in the locking slot in the second portion of the hinge assembly.” Thus, Claim 26 now positively recites a locking slot in the second portion of the hinge assembly, the locking slot including a first end disposed

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towards the hinge pin and a second end disposed away from the hinge pin; and a locking member disposed in the locking slot in the second portion of the hinge assembly.

The Carlson patent does not disclose a locking slot in a second portion of the hinge assembly, the locking slot including a first end disposed towards a hinge pin and a second end disposed away from the hinge pin; and a locking member disposed in the locking slot in the second portion of the hinge assembly. Because the Carlson patent does not disclose each and every element of Claim 26, Applicants request that this Section 102(b) rejection be withdrawn. In addition, Claim 27 should also be allowable at least because this claim is dependent upon amended Claim 26. Therefore, Applicants request that this Section 102(b) rejection of Claims 26 and 27 be withdrawn.

Applicants amended Claim 28 to provide, *inter alia*, the following:

a first hinge portion connected to the first section of the table top, the first hinge portion including a connector portion with an aperture;

a second hinge portion connected to the second section of the table top, the second hinge portion including a connector portion with an aperture;

a hinge pin extending through the aperture in the connector portion of the first hinge portion and the aperture in the connector portion of the second hinge portion to connect the first hinge portion of the hinge assembly and the second hinge portion of the hinge assembly;

a locking member movable relative to the second hinge portion of the hinge assembly between a locked position and an unlocked position;

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an engaging portion the first hinge portion of the hinge assembly, the engaging portion engaging the locking member when the locking member is in the locked position, the engaging portion being spaced apart from the locking member when the locking member is in the unlocked position to allow the table to be moved between the first position and the second position; and

a lock actuating mechanism that moves the locking member between the locked position and the unlocked position, the lock actuating mechanism including an aperture and the hinge pin extending through the aperture to connect the lock actuating mechanism to the hinge assembly.

The Carlson patent does not disclose a first hinge portion connected to a first section of the table top, the first hinge portion including a connector portion with an aperture; a second hinge portion connected to a second section of the table top, the second hinge portion including a connector portion with an aperture; a hinge pin extending through the aperture in the connector portion of the first hinge portion and the aperture in the connector portion of the second hinge portion to connect the first hinge portion of the hinge assembly and the second hinge portion of the hinge assembly; a locking member movable relative to the second hinge portion of the hinge assembly between a locked position and an unlocked position; an engaging portion the first hinge portion of the hinge assembly, the engaging portion engaging the locking member when the locking member is in the locked position, the engaging portion being spaced apart from the locking member when the locking member is in the unlocked position to allow the table to be moved between the first position and the second

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position; and a lock actuating mechanism that moves the locking member between the locked position and the unlocked position, the lock actuating mechanism including an aperture and the hinge pin extending through the aperture to connect the lock actuating mechanism to the hinge assembly.

Because the Carlson patent does not disclose each and every element of Claim 28, Applicants request that this Section 102(b) rejection be withdrawn. In addition, Claims 29, 30 and 32-36 should also be allowable at least because these claims are dependent upon amended Claim 28. Therefore, Applicants request that this Section 102(b) rejection of Claims 28-30 and 32-36 be withdrawn.

Applicants amended Claim 46 to provide, *inter alia*, the following:

a-table top including a first table top section and a second table top section, the first table top section and the second table top section being constructed from blow-molded plastic and including an upper surface, a lower surface and a hollow interior portion that are integrally formed during the blow-molding process; the first table top section and the second table top being positionable between a folded position and unfolded position;

a table frame including:

a first metal rail connected to the first table top section; and

a second metal rail connected to the second table top section;

a hinge assembly pivotally interconnecting the first rail and the second rail of the table frame, the hinge assembly comprising:

a first hinge connector connected to the first rail;

a second hinge connector connected to the second rail;

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a hinge pin connecting the first hinge connector and the second hinge connector;

a locking slot in the second hinge connector;

a locking pin movable within the locking slot being a locked position and an unlocked position; and

an engaging member of the first hinge connector that engages the locking pin when the locking pin is in the locked position, the engaging member being spaced apart from the locking pin is in the unlocked position; and

a lever that is movable between a first position and a second position, the lever including an engaging surface that engages the locking pin to move the locking pin between the locked position and the unlocked position.

The Carlson patent, however, does not disclose table top including a first table top section and a second table top section, the first table top section and the second table top section being constructed from blow-molded plastic and including an upper surface, a lower surface and a hollow interior portion that are integrally formed during the blow-molding process; the first table top section and the second table top being positionable between a folded position and unfolded position; a table frame including: a first metal rail connected to the first table top section; and a second metal rail connected to the second table top section; a hinge assembly pivotally interconnecting the first rail portion and the second rail of the table frame, the hinge assembly comprising: a first hinge connector connected to the first rail; a second hinge connector connected to the second rail; a hinge pin connecting the first hinge connector and the second hinge connector; a locking slot in the second

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hinge connector; a locking pin movable within the locking slot being a locked position and an unlocked position; and an engaging member of the first hinge connector that engages the locking pin when the locking pin is in the locked position, the engaging member being spaced apart from the locking pin is in the unlocked position; and a lever that is movable between a first position and a second position, the lever including an engaging surface that engages the locking pin to move the locking pin between the locked position and the unlocked position.

Because the Carlson patent does not disclose each and every element of Claim 46, Applicants request that this Section 102(b) rejection be withdrawn.

III. CONCLUSION

In view of the foregoing, Applicant submits that Claims 21-47 are allowable over the cited references and are in condition for allowance. Accordingly, Applicant requests that a Notice of Allowance be promptly issued.

If any further impediments to allowance of this application remain, the Examiner is cordially invited to contact the undersigned by telephone so that these remaining issues may be promptly resolved.

The Commissioner is authorized to charge payment of any additional fees associated with this communication, which have not otherwise been paid, to Deposit Account No. 23-3178. If any additional extension of time is required, which have not otherwise been requested, please consider this a petition therefore and charge any additional fees that may be required to Deposit Account No. 23-

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3178.

Respectfully submitted,

Dated: September 3, 2008

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